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APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,910	12/18/2001		Glenn S. Solomon	CBL-104/DIV	4700
27652	7590	10/08/2003		EXAM	INER
JOSHUA D 204 CASTRO		ERG	YEVSIKOV, VICTOR V		
FREMONT,	-	39	· ART UNIT	PAPER NUMBER	
				2825	

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/023,910	SOLOMON ET AL.					
Office Action Summary	Examiner	Art Unit					
	Victor Yevsikov	2825					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	of(a). In no event, however, may a rewithin the statutory minimum of thirty ill apply and will expire SIX (6) MONT cause the application to become ABA	ply be timely filed (30) days will be considered timely. HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).					
1)⊠ Responsive to communication(s) filed on 18 E	December 2001 and 23 Jun	ne 2003 .					
	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
- · · · · · · · · · · · · · · · · · · ·	Claim(s) <u>21-32</u> is/are pending in the application.						
<u> </u>	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) <u>27-32</u> is/are allowed.	_						
6)⊠ Claim(s) <u>21 and 23-26</u> is/are rejected.							
7) Claim(s) <u>22</u> is/are objected to.	Claim(s) <u>22</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9) The specification is objected to by the Examiner							
10)⊠ The drawing(s) filed on <u>18 December 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1.☐ Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No						
Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) ☐ The translation of the foreign language provisional application has been received. 15)☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) ☑ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2.</u>	5) Notice of In	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152)					

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21 and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kryliouk et al..

Kryliouk teaches a variety of methods of generating a stack of GaN layers. The layer indicated in Figure 1B as the Barrier Layer corresponds to applicant's buffer layer. This layer is .2- .3 microns thick and is composed of GaN. (Claim 25) Layer listed as Thick GaN Layer in figure 1 reads as applicant's epitaxial layer and is comprised of GaN, formed by HVPE and is 100-300 microns thick. (Claim 26) Lastly, the element labeled Substrate in Figure 1 of Kryliouk reads upon applicant's substrate. Additionally, as indicated in Figure 1 of Kryliouk, the substrate is eventually separated from the barrier layer or buffer layer. The only issue in question is how the Barrier layer is created in Kryliouk. In claim 21, the applicant recites that their layer is formed by MOCVD. In column 14, lines 6-7, of Kryliouk details that the Barrier layer is formed by MOCVD. Therefore, each and every element of applicant's claims is found in the Kryliouk reference.

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Status of the Remaining Claims

Claims 27-32 are allowed.

These claims include a cap layer between the buffer or barrier layer and the

epitaxial layer which is not seen in the prior art.

Claim 22 is objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

In claim 22, the applicant recites that the Buffer layer and the epitaxial layer are

removed from one another. This is not seen in the prior art of Kryliouk.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Victor Yevsikov whose telephone number is 703-305-

0758. The examiner can normally be reached on Monday-Fridays 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-308-

0658.

V. Year Ver

Mss/ VY

Victor Yevsikov

Examiner

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MATTHEW SMITH
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800